

CSE 1201 Final Project

Lecturers: Lenandlar Singh, Dave Sarran, Rayad Lackhan

Submission – July 16, 2021, 11:59 P.M

Group Size – Minimum 6 – Maximum 10 (6 - 10) [self-identified]

Worth - 25%

Project Details

Description

You are required to write a C program that serves the function of a Program Admission Manager. This program will help the Head of the Department of Computer Science make decisions about which students to admit into the various programs offered by the department of Computer Science.

Essentially, this program functionality to meet the following needs:

- Allow students to apply for one or more of the three programs (Computer Science (CS), Information Technology (IT), Information System(IS)) offered by the department of computer science
- Provide reports on applicants to the three programs offered by the department: CS, IT, IS
- Automatically Accept (or not accept) applicants to the programs they applied for based on their application information
 - Acceptance into all three programs are based on the criteria:
 - 5 subjects at CSEC including Mathematics and English
 - 16 years old or over
- Automatically Place applicants to the program that best fits their application information and the following information
 - No program can accept more than 20 students even if there are many more applications
 - Gender considerations with an emphasis on equal opportunity to education should be considered in your acceptance process
 - Other demographic elements related to equal opportunity should be considered when deciding who to admit into a program
 - If more than 20 students apply for CS then the following should also be considered before acceptance:
 - Mathematics and English grades
 - Total Number of subjects, type of subjects passed at CSEC/A Levels
 - Demographics information
 - Any other criteria you deemed important
- A user should be able to perform some sort of searching on the list of applicants
- Provide reports on acceptance / non-acceptance for each program

Data Requirement

To achieve the above functionality your program will need to make use of the following information:

Applicant Information

- Name
- Date of Birth
- Address
- Gender
- Number of subjects passed
- List of subjects passed and grade
- Date of Application
- Programs applying for
 - CS
 - IT
 - IS
- Acceptance Criteria
 - 5 subject, grades 1 – 3 at CSEC including Mathematics and English
 - Age 16 years or older

Implementation in C

In terms of implementation, you are expected to make use of the C programming language features and functionalities including appropriate use of Arrays, Structures, Pointers, Files.

Submission Requirements

You will need to submit your assignment (C program and data file to the Moodle course page with the list of group members (name and USIs). Only an identified group leader should submit the assignment. All files should be added to a folder, zipped, and then submitted.

Project Report

You will also need to submit a short report on the contribution of each group member towards the project. This report should also include a brief description of the problem you are solving, some design elements including flowchart (s), decisions you made about the algorithms you implemented.

Evaluation Criteria

Your tasks will be graded using the following list of criteria:

- Good data management
- Creativity and Functionality of your program, including choice of analyses
- Program design - organization of your code e.g. good use of functions, names, etc.

Plagiarism

Any evidence of collusion between groups or related acts will result in an automatic zero-mark allocation and each member of the group will be reported to the relevant university office responsible for handling plagiarism.

Lenandlar Singh

Dave Saran

Rayad Lackhan